Low Density
Infill Housing Design Guidelines
for the Rossdale Area Redevelopment Plan

Prepared for THE CITY OF Edmonton PLANNING AND BUILDING

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I. FLOOD PROTECTION MEASURES

The Rossdale community is very significantly affected by and must address the issue of floodplain management if it is to see renewal. 160 of its 175 lots (91.4%) are either fully or partially between the floodway and the 1:100 year flood line. The design flood level has been designated at 622.8 m above sea level, by Alberta Environment. The floodway channel has been assumed to be within the 1:25 year flood line and is essentially within the CCRP (Capital City Recreation Park) boundary and the RDA (Restricted Development Area). Development is restricted within these areas by provincial legislation and since this restriction is recognized in the Edmonton Land Use Bylaw as a land use restriction overlay, residential development in the floodway is thereby prohibited.

While the RDA prohibits development in the sloping bank areas near Rossdale within the 1:25 year flood line, an additional 58 of the 175 lots (33.1%) are either fully or partially between the floodway and the 1:50 year flood line. What this means to most of these properties is that the design flood level exceeds the existing grade by 0.65 to 1.0 metres. Add to this the 0.3 metre clearance to floor or structure, plus the 0.3 metre floor system of a typical wood frame home, the first habitable floor level of a house on these lots would be from 1.25 metres (4.1 ft.) to 1.6 metres (5.2 ft.) above existing grade.

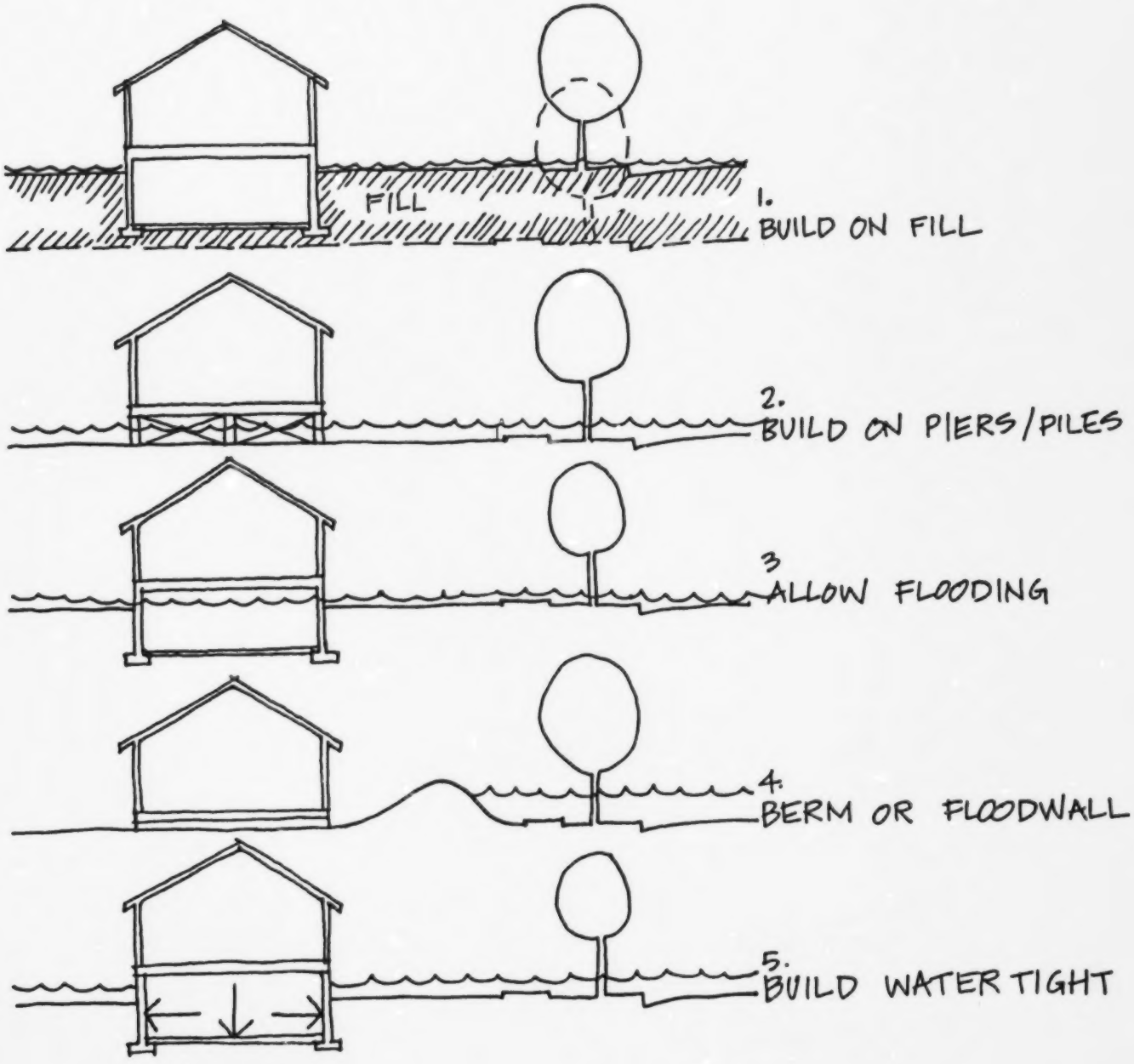
The balance of the lots in Rossdale, 102 of 175 (58.3%), fall within the range of a 0.15 to 0.6 metre differential between existing grade and the design flood level. This 0.75 to 1.2 metre (2.5 to 3.9 ft.) level change is not unusual in any residential area where a variety of housing forms exist. It is however excessive in Rossdale where existing housing stock dates back to the turn of the century and is generally of low profile with entries near grade.

It is clear that redevelopment of Rossdale, under flood protection guidelines, will have a significant impact on the existing homes and the character of the area. Any new housing, while projecting above grade substantially, must contain all habitable areas above the design flood levels. This will mean larger site coverages and greater building heights, further aggravating the issue of compatibility.

These designations of floodway and floodplain establish a two-zone floodplain area in Rossdale. CMHC Regulations for Building in a Flood Risk Area (NHA Document 5701) outline five basic methods of construction in flood prone areas:

Rossdale

1:25 Year Flood Line
1:100 Year Flood Line
Lots Affected by
Floodplain Regulations


FILL
1.
BUILD ON FILL
2.
BUILD ON PIERS/PILES
3
ALLOW FLOODING
4.
BERM OR FLOODWALL
5.
BUILD WATER TIGHT

1. Rock or earth fill can be used to raise the elevation of a building above the possible flood level.

2. The building can be raised on posts, piles or piers.

3. The building can be designed to allow the basement to be flooded, which equalizes water pressure on the foundation walls, and allows the occupants to remain in the dwelling, at least during the initial stages of a flood.

4. A berm or floodwall, the top of which is higher than the one-in-a-hundred-year chance of a expected flood level, can be built to encircle a single building or group of buildings.

5. A building can be designed so that the basement is watertight, but it must be able to withstand the forces created by the surrounding floodwater.

Funding is not available under the National Housing Act (NHA) unless options 1, 2 or 3 are used. Berming requires the cooperations of all persons in a flood prone area and is only as effective as its weakest point. A building designed to resist hydrostatic pressure would be so expensive that few could afford it.

Option 1 — Using rock or earth fill to raise the elevation of a building.

This option is only viable where a whole district can be raised with compacted fill. This includes roadways. Any existing vegetation would have to be destroyed. Building on fill also requires special foundation design. For these reasons, raising the elevation of Rossdale is not considered a viable option.

Option 2 — Raising a building on posts, piles or piers.

For obvious aesthetic reasons, this option would result in a housing form out of character with the existing neighbourhood of Rossdale. In addition it is a solution better suited to areas constantly exposed to flood risk, unlike the North Saskatchewan Valley.

Option 3 — Allowing the basement to be flooded.

Perhaps the most realistic approach to flood design is to minimize damage, while allowing the forces of nature to run their course. Water pressure can be equalized within and without the building during a flood by deliberately allowing the basement to

be flooded. The following requirements will enable the house to withstand the ravages of flooding and be reasonably easy to restore to dryness, cleanliness and soundness after the flood.

A. Backfill

1. Backfill must be placed in accordance with Subsection 12.C of Residential Standards 1980.

2. Backfill must be graded at least up to the design flood level at the exterior of the foundation wall.

3. Backfill must be graded away from the foundation at a slope not exceeding 1 in 30 for a distance of at least 4.5 metres, beyond which the slope can be increased to 1 in 4 down to the original grade.

B. Footings and Foundations

4. Footings and foundation walls must be cast-in-place concrete.

5. Footings, foundation walls and floor slabs-on-ground must be designed to resist all the effect of loads and other influences that might be expected during a flood, including hydrostatic pressure, and must satisfy the requirements of Part 4 of the National Building Code of Canada 1980. The designer must be a professional engineer or architect skilled in such design and licensed to practise under provincial or territorial legislation.

6. The clear height from the top of the basement concrete slab-on-ground to the underside of the first storey floor system, including beams, must be not less than 1930 mm.

7. Basement or cellar walls must have at least two openable windows. These must be on opposite sides of the building. The top of the window sills must be not higher than 150 mm below grade.

8. Basement or cellar walls and floors must not have any finishing materials covering the concrete.

9. Basements must not contain habitable space, or be used for the storage of immovable objects or hazardous materials that are buoyant, flammable, explosive or toxic.

10. Foundation insulation must be applied to the exterior of the walls and be fastened to prevent detachment during flooding.

C. Floor Construction

11. All ground within the foundation walls must be covered by a concrete slab constructed in accordance with Article 16.F.1 of Residential Standards 1980.

12. The top of a structural slab-on-ground supporting habitable portion of a building must be at least 300 mm above the design flood level; a statement to this effect must be contained in the surveyor's certificate submitted to CMHC.

13. Load-bearing floor slabs-on-ground must be designed in accordance with Part 4 of the National Building Code of Canada 1980; the designer must be a professional engineer or architect skilled in such design and licensed to practise under the appropriate provincial or territorial legislation.

14. The underside of floor joists and sill plates supporting the habitable portions of a building must be at least 300 mm above the design flood level; a statement to this effect has to be contained in the surveyor's certificate submitted to CMHC.

15. The underside of wood beams supporting floors must be at least 300 mm above the design flood level.

16. Columns supporting floor loads must be steel, as is required in Subsection 17.C of Residential Standards 1980.

17. Load-bearing walls constructed below the design flood level must be cast-in-place concrete.

D. Anchorage

18. Wood and steel frame buildings must be anchored to the foundation to prevent the unit from floating off the foundation should the design flood level be exceeded.

19. Exterior walls built on floor slabs-on-ground must be anchored according to Article 23.F.2 of Residential Standards 1980.

20. First-floor joists must either have the ends embedded in the concrete foundation or the header joist mechanically fastened to the sill plate anchor bolts, or employ some other system providing equivalent protection.

E. Basement or Cellar Drainage System

21. A covered sump pit with an automatic submersible pump must be provided in all basements or cellars. Such a unit may be required if the normal water table is high; in a flood situation it will keep the basement relatively free of water until it is purposely flooded.

22. The outflow pipe must discharge above the design flood level.

23. A separate electrical circuit must be provided for the sump pump, and the operating switch must be located above the design flood level. Before the flood waters reach the basement window level, the sump pump can be shut off at the electrical service box, and the pump disconnected and stored above the flood level.

24. Granular material under the basement or cellar slab must be graded so that the entire area is drained to the sump pit.

25. Basement or cellar slabs must have a positive slope to the floor drain.

26. The sump pump may be connected to a municipal storm sewer but must not be connected to a municipal sanitary sewer system. When the sump is connected to the storm sewer and when the building's sanitary drains are connected to municipal services, backwater valves should be installed to prevent back up into the basement.

F. Measures to Continued Occupancy

27. Units serviced by drilled wells must either have the required well casing extend upwards for at least 150 mm above the design flood level if the well is vented, or have the well casing sealed at the top.

28. Waste connections for plumbing facilities must not be installed below the design flood level.

29. Central heating units, such as oil, gas or electrical forced-air furnaces, including all ductwork and serviced water heaters, must not be installed below the design flood level.

30. Electrical service panels must be located above the design flood level. Electrical circuits servicing areas below the design flood level must be on separate circuits, and be capable of being disconnected.

G. Summary

1. Cast-in-place concrete designed by a professional engineer or architect.

2. Foundation insulation on exterior side.

3. Frame buildings adequately anchored to concrete foundation wall.

4. Electrical panel and heating units above flood level.

5. Underside of floor 300 mm above design flood level.

6. Openable basement window not higher than 150 mm below grade.

7. Basement wall and floor unfinished.

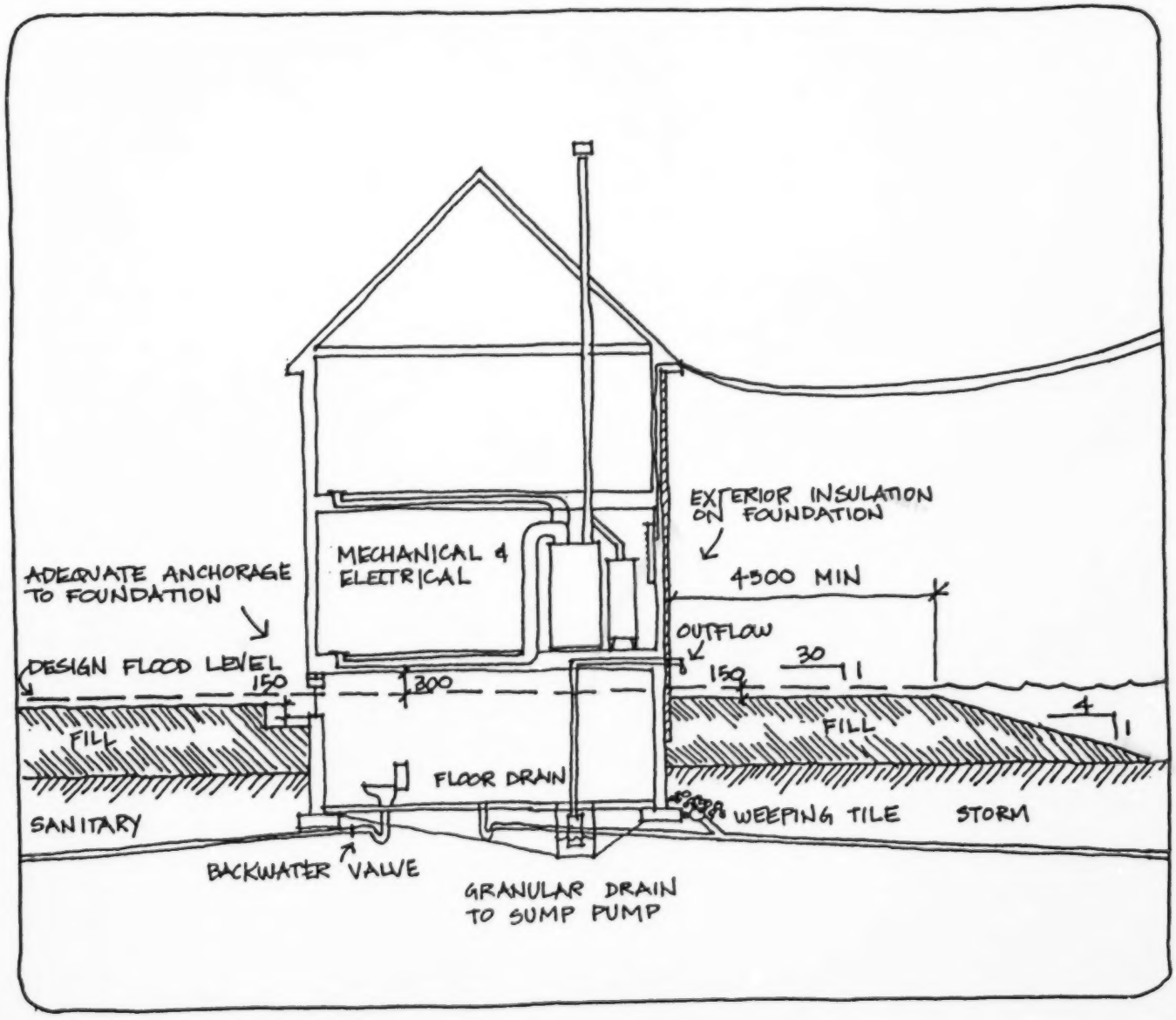
8. Basement drainage not connected to municipal sewage system.

9. Well casing extending 150 mm above the design flood level.

10. Finished grade elevation at least as high as the design flood level.

If NHA loans are to be made or insured, all the CMHC regulations contained in Supplement T.5, dated 1983-11-30 must be adhered to.

These regulations are thorough, complete and optimal as they result in construction which can withstand flooding, residences which can continue to be occupied during a flood and can easily be restored after inundation. Adjustments must be made acknowledging that new construction is occurring in an established neighbourhood. Floodplain regulations in an infill area must address the issue of compatibility. In addition we must accept the fact that despite the best intentions of such regulations, we are nevertheless willing to compromise and inhabit an area below the flood line, finishing the interiors and accepting the damages and inevitable clean-up after a flood.


EXTERIOR INSULATION ON FOUNDATION
MECHANICAL & ELECTRICAL
ADEQUATE ANCHORAGE TO FOUNDATION
4500 MIN
OUTFLOW
DESIGN FLOOD LEVEL
150
300
150
30
1
4
1
FILL
FILL
FLOOR DRAIN
SANITARY
WEEPING TILE
STORM
BACKWATER VALVE
GRANULAR DRAIN TO SUMP PUMP

It is with these issues in mind that the CMHC measures must be considered recommended guidelines and not hard and fast regulations if NHA funding is not a consideration.

Recommended Requirements for Building in Flood Risk Infill Areas in Rossdale

A. Flood Protection

1. Foundations must be constructed of cast-in-place reinforced concrete designed by a professional engineer or architect and frame buildings must be adequately anchored to these foundation walls.

2. The underside of the first floor and any associated structure (i.e., beams) must be 300 mm (12") above the design flood level.

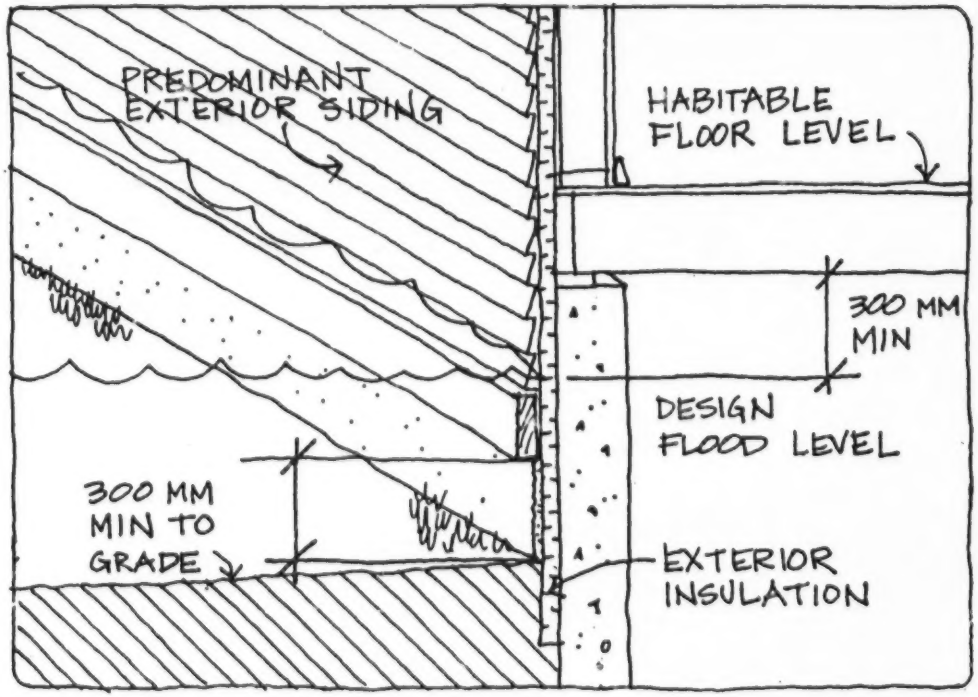
3. Electrical panel and heating units must be above the design flood level.

4. There must be two openable windows on opposite walls of the basement, with sills no higher than 150 mm below grade.

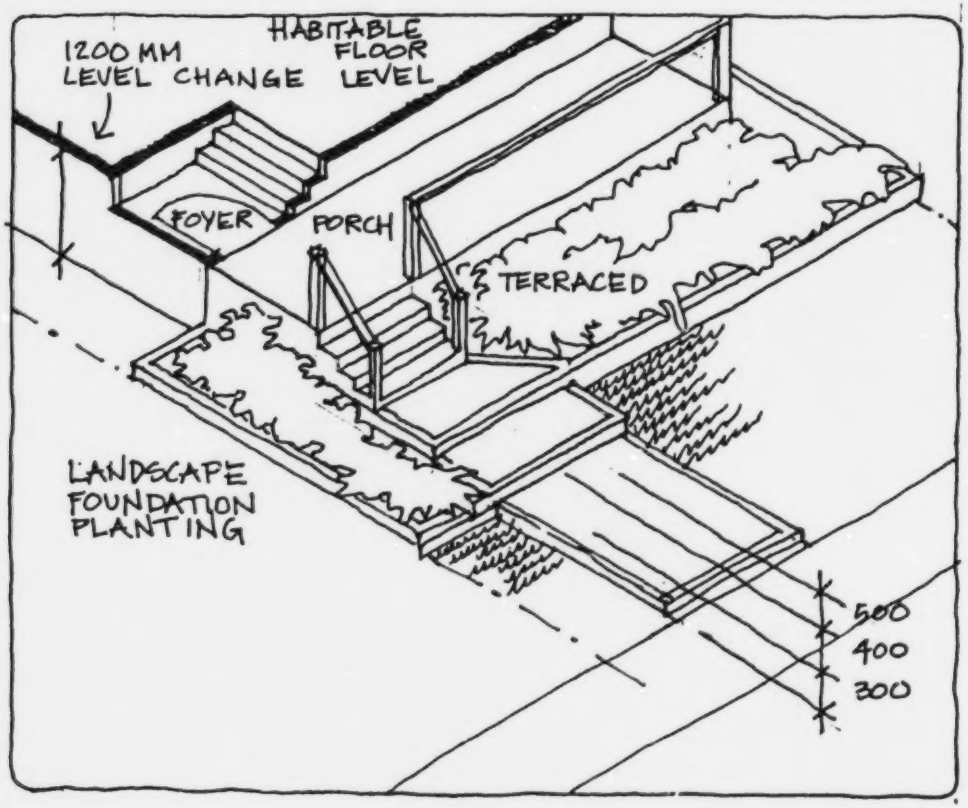
5. Basement drainage must not be connected to the municipal sanitary sewer system and backwater valves should be installed in sanitary drains located on the lower level, to prevent back up into the basement.

B. Compatibility

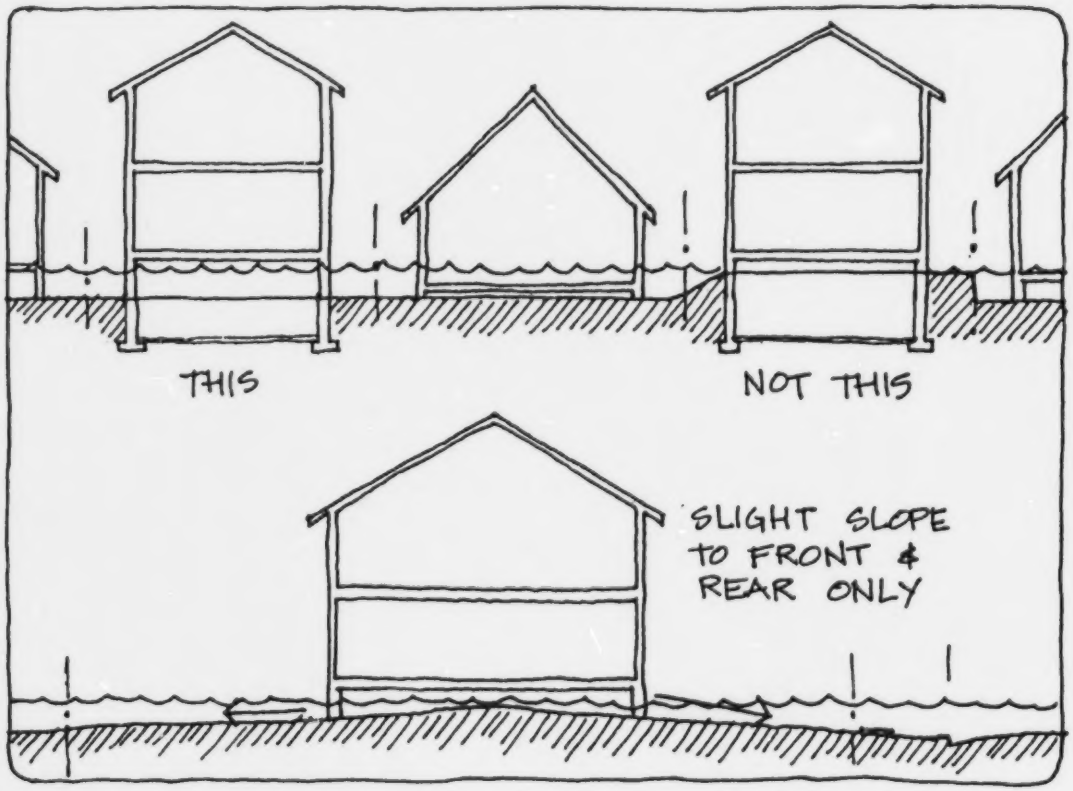
1. Predominant exterior cladding must extend to within 300 mm (12") of grade on all sides of the building.



2. Where the first floor is more than 900 mm (36") above grade, the elevation difference should not be abrupt, but should be split by means of landscape terracing, exterior stairs, interior level changes such as sunken foyers, or combinations of all of the above.



3. Finish grade elevations should not be raised on side yards particularly on minimum setbacks (1.2 m). Drainage must be contained on the site, sloping towards front and rear only.



4. Building heights shall be measured from the existing grade and shall include the height differential required for flood protection.

C. Use of Flooded Levels

1. Basements must not be used for the storage of immovable objects or hazardous materials that are buoyant, flammable, explosive or toxic.

2. Basements should not contain the primary sleeping quarters of a residence or kitchen.

3. Any interior improvements to the basement level subject to flooding shall be at the owner's risk and costs incurred in cleaning and restoration shall be the responsibility of the owner.

II LAND USE GUIDELINES

Rossdale has always been the centre of activity in Edmonton. Serving a variety of industries located in Ross Flats, it has always been a working class community. However, current influences on Rossdale are not sympathetic. Public utilities, major transportation routes, and city-wide facilities (such as John Ducey Park) as well as the CCRP, and proximity to the potentially flooding North Saskatchewan River have all combined to create the South Rossdale "oasis". It is these external and peripheral forces, as well as the continued uncertainty concerning its future, that have led to and will continue to affect a renewal in South Rossdale.

Its mature, tree-lined streets, wood frame houses, and riverside setting with spectacular skyline views, to say nothing of its proximity to city centre, will assure its continuance as a desirable place to live. Whether South Rossdale continues to be a tranquil, low density, residential enclave is very much subject to the resolution of external influences. The specific kind of tranquil, low density residential enclave that South Rossdale will become will be very much a result of land use guidelines and the criteria for infill development.

Lots in Rossdale are smaller than average (10.16 m x 30.48 m) (33.3 ft. x 100.0 ft.) - 309.7 m^2 (3333.3 $ft.^2$). The areas proposed to remain low density are currently zoned RF3. The general purpose of this Land Use category is to provide a district for single detached and semi-detached housing, while allowing small scale conversions and infill redevelopment to housing forms containing up to four dwelling units per building.

While minimum area and frontage dimensions can be relaxed to allow single detached dwellings on the existing lots, a minimum of 15.43 metres (50.6 ft.) frontage would be required to allow a semi-detached dwelling as a permitted land use. While the variation is small (0.18 metres, 0.6 feet), the consolidation of three lots and resubdivision into two lots (10.16 x 3 - 30.48 ÷ 2 = 15.24 metres (50 ft.)) would still result in lots technically insufficient for development of anything larger than a single detached dwelling. This kind of consolidation could occur in South Rossdale, as there are 128 city owned lots, 81 of which are vacant and many are in groups of three or more. Since the variation is so small (0.18 metres, 0.6 feet) relaxation would be in order to permit development of semi-detached dwellings.

The result of the RF3 land use regulations, and Section 51.2 of the Land Use Bylaw exception as it applies to South Rossdale, is that:

1. Single family redevelopment can occur on individual lots but cannot be controlled because it is a permitted use.

2. Semi-detached redevelopment can occur on two lots or on a resubdivided frontage of 15.24 metres (50 ft.) but likewise cannot be controlled because it is a permitted use.

3. Duplexes, row houses and stacked row houses, and apartment buildings of up to four units could occur on three lots, or on a resubdivided frontage of varying widths from 15.24 metres to 27.94 metres (50 ft. to 91.6 ft.).

The following chart outlines the various lot widths and areas that could exist under resubdivision and unit types which could be built as permitted uses or discretionary uses under the existing RF3 category.

Consolidated Lot Width		Components	Area (W X 100 ft) (W X 30.48 m)	Allowable Unit Types (see below)
Metres	Feet	Feet		
7.62	25.09	1 @ 25	232.3	.
10.16	33.3	1 @ 33.3	309.7	1.
15.24	50.0	2 @ 25	464.5	1,2,3,(4)*
17.78	58.3	33.3 + 25	541.9	1,2,3,4,
20.32	66.7	22 @ 33.3	619.4	1,2,3,4,5
22.86	75.0	3 @ 25	696.8	1,2,3,4,5,(6)*
25.38	83.3	33.3 + 2 @ 25	774.2	1,2,3,4,5,6
27.94	91.7	25 + 2 @ 33.3	851.6	1,2,3,4,5,6,7,8
30.48	100.0	3 @ 33.3	979.0	1,2,3,4,5,6,7,8

UNIT TYPES - AREAS REQUIRED FOR UNITS AND TYPE

Permitted Uses	RF-3	Section 51.2
1. Single Detached	360 m^2	304.8 m^2
2. Semi-Detached	600 m^2	470.0 m^2
3. Duplex	600 m^2	470.0 m^2
Discretionary Uses		
4. Duplex	600 m^2	470.0 m^2
5. Triplex Row	550 m^2	-
6. Fourplex Row	700 m^2	-
7. Fourplex Apartment	800 m^2	-
8. Fourplex Stacked Row	800 m^2	-

* Allowable use by relaxation, since area provided is only marginally less than area required.

In summary, the existing land use districting favours single detached infill development on single lots, but with some resubdivision a variety of double lot widths could accommodate semi-detached units (15.24 metres to 20.32 metres, 50 feet to 66.7 feet).

It is clear that because of the small lot sizes in South Rossdale, a single family housing form is preferred. It is also clear that resubdivision of the many vacant lot groupings, particularly the Artic Ice site (100 Street and 97 Avenue), would introduce the desired variety of housing forms, from single family on larger lots to semi-detached and duplex. The addition of the 7.62 metre (25 ft.) wide lot (three 10.16 m lots divided into four lots rather than two) would also allow for the single detached housing form to replace the semi-detached form as the preferred development of a 15.24 metre (50 ft.) site. As well as this, the addition of the 7.62 metre (25 ft.) lot would provide a smaller increment of lot width to be added to an existing property for expansion, or to be consolidated with another vacant lot to promote a variety of housing types. The 7.62 metre lot would be more affordable and would require minimal yard maintenance.

Compatibility of the permitted uses - single detached and semi-detached - cannot be ensured by the use of guidelines.

Proposed Guidelines - Revisions and Additions

1. Permitted uses should remain the same. Additional regulation of single detached dwellings on lot widths less than 10 metres (32.8 feet) should be included.

2. Site area requirements should be revised as follows:
   a) 230 m^2 for each Single Detached Dwelling;
   b) 300 m^2 for each Semi-Detached or Duplex Dwelling;
   c) 200 m^2 for each Row Housing End Dwelling which is not a Semi-Detached Dwelling;
   d) 150 m^2 for each Row Housing Internal Dwelling; and,
   e) 800 m^2 for each Apartment Housing or Stacked Row Housing Development of up to four units.

3. The minimum site width should be provided as follows:
   a) 7.62 metres for each Single Detached Dwelling;
   b) 15.2 metres for each two Semi-Detached or Duplex Dwellings;
   c) 20 metres for each three Row House Dwelling; and,
   d) 22 metres for each four Row House Dwellings.

4. Minimum site depth should be 30 metres (98.4 feet).

5. Maximum height should not exceed 10 metres (32.8 feet), nor 3 storeys.

6. Site coverage should not exceed 45% with a maximum of 35% for a principal building and a maximum of 15% for accessory buildings.

7. The minimum front yard should be 3.0 metres (9.8 ft.) but must be within 10% of the adjacent front yards.

8. Minimum rear yard for a principal building should be 7.5 metres except in the case of a corner site, where it should be 4.5 metres (14.8 ft.) and for accessory buildings a minimum of 1.2 metres (3.94 ft.).

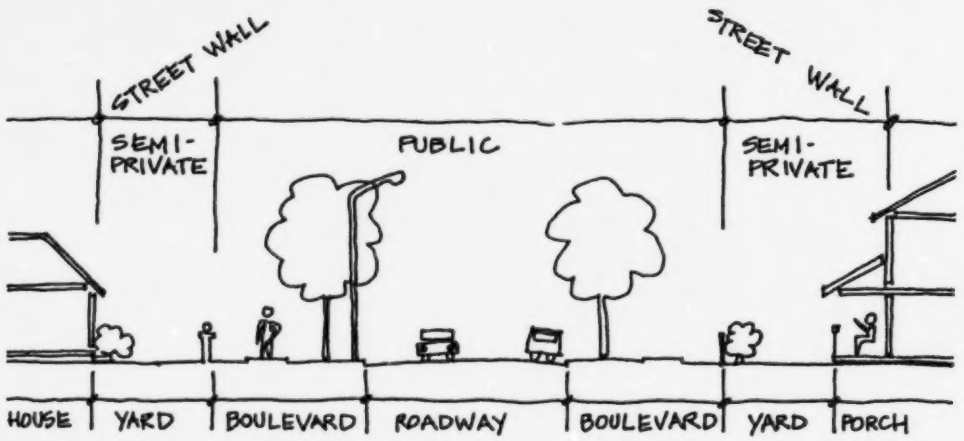
9. Sideyards should be established on the following basis:
   a) Side yards should total at least 20% of the site width, but the requirement should not be more than 6.0 metres (19.7 feet) with a minimum side yard of 1.2 metres (3.94 feet) except that the minimum side yard for buildings over 7.5 metres (24.6 feet) in height should be 2 metres (6.6 feet).

   b) On a corner site where the building fronts on the front yard, the minimum side yard abutting a flanking public roadway other than a lane should be 20% of the site width, to a maximum requirement of 3.0 metres (9.8 feet).

   c) On a corner site where the building fronts on a flanking public roadway other than a lane, the minimum side yard abutting the flanking public roadway should be 3.0 metres (9.8 feet).

10. Separation Space should be provided between two or more dwellings or portions thereof on the same site in accordance with Section 58 of this Bylaw.

These revisions would allow for a greater degree of flexibility in the type and location of dwellings on the site/s.



III CRITERIA FOR INFILL DEVELOPMENT

Modification of existing land use categories or rezoning to another land use category can only effect the general form of development: its density, internal massing and, indirectly or unofficially, its occupant type (i.e., renters, owners). Clearly, further regulations or guidelines are necessary to ensure that both permitted and discretionary uses are compatible with existing development. The following are objectives for these guidelines:

1. To introduce variety to the streetscape and housing types.

2. To re-establish the street wall and privacy zones that existed in the neighbourhood before demolition of many of the homes.

3. To ensure that new development respects the style, scale and siting of existing housing stock.

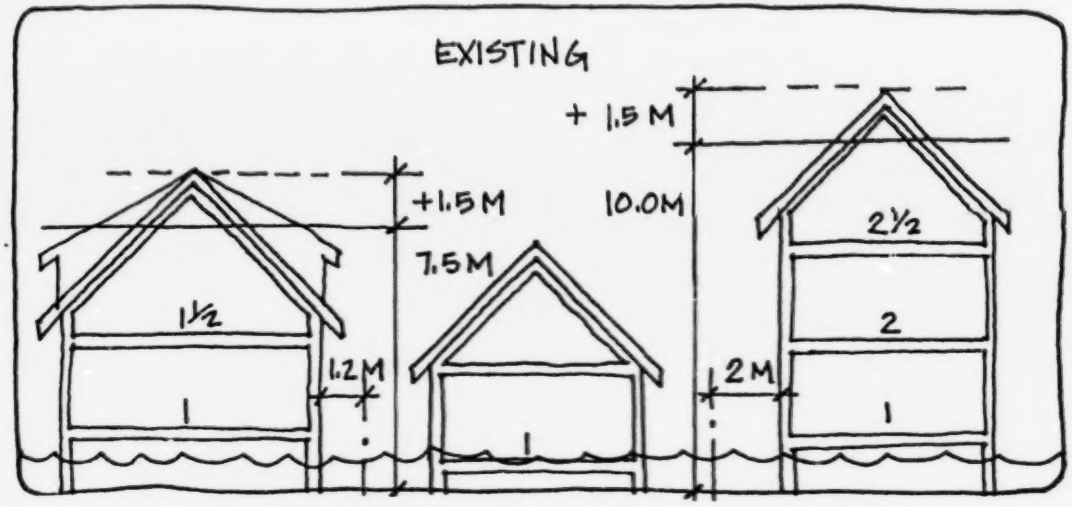
4. To establish a rhythm or interval of development that is consistent with the narrow lot width that exists.

The historic nature of South Rossdale, as the first real subdivision in Edmonton, is still apparent in its remaining housing stock. The squat working class homes are typically 1½ storey clapboard houses with steeply pitched roofs, front porches and double hung windows. While what remains cannot be considered vintage period architecture, some charm and type exists within its historical context and certainly within its generic types: the two storey gable, the one and one-half storey gable, and the bungalow.

New development, due to changing building technologies and lifestyles, will differ from what exists, to say nothing of the effect of the regulations regarding flood plain design. The objectives in South Rossdale must therefore reflect a concern for existing development in terms of style, siting, height, etc. To these ends the following should be considered:

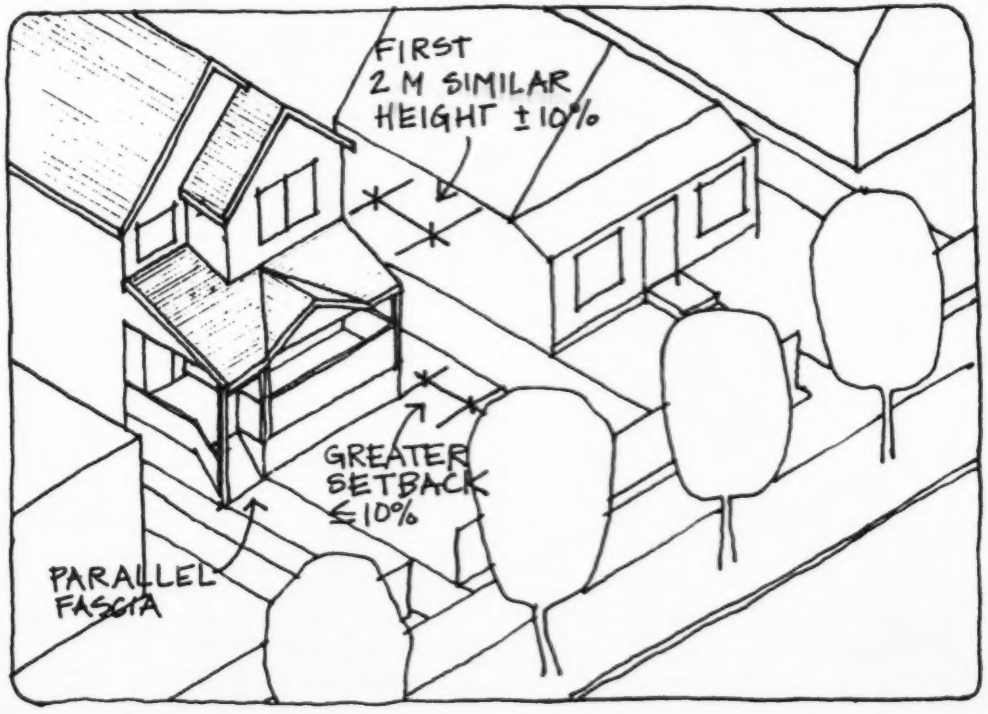
1. Height Compatibility

- Since the predominant massing in Rossdale is 1½ storeys, redevelopment of an adjacent lot to the maximum of 10 metres (plus 1.5 metres if roof slopes exceed 20 degrees) will have a significant impact.



- To mitigate this impact the front 2 metres (6.6 feet) of any new development or renovation/addition to an existing home should not exceed the height of the adjacent dwelling, or average of dwellings on both sides of 10%. This can be realized with a front porch roof, building to a maximum height only at the rear or the dwelling, or orienting the roof slope such that the lowest fascia height faces and is parallel to the street.

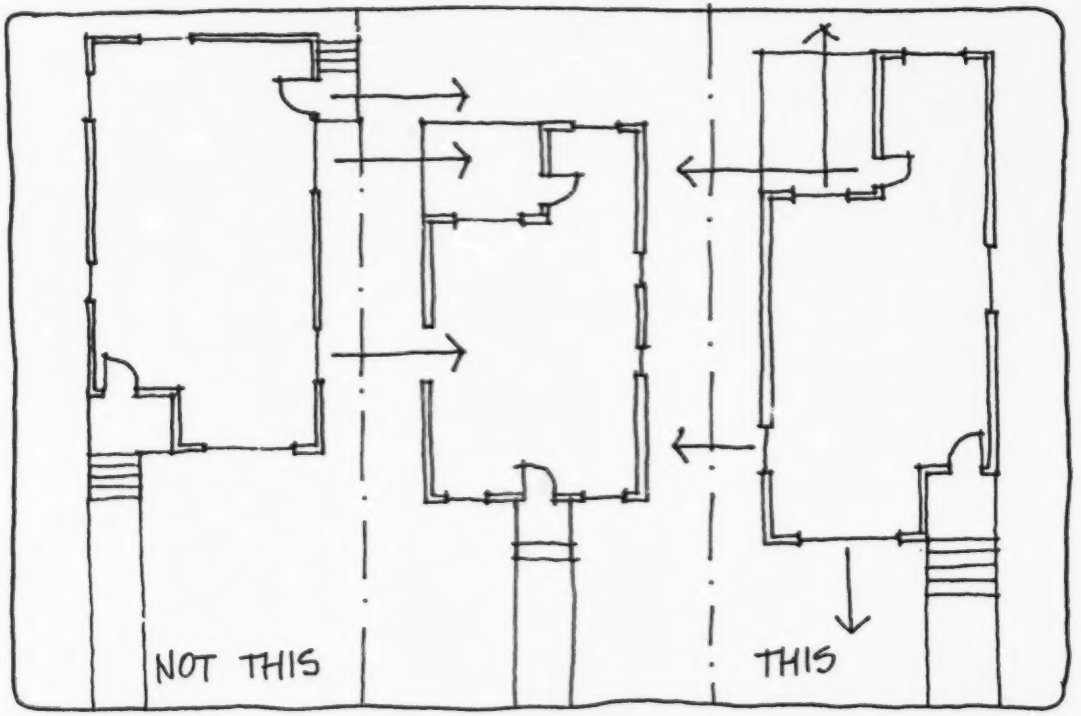
- If a building exceeds the height of adjacent dwellings, the front yard should be greater (not less) than the adjacent front yards by a maximum of 10%.



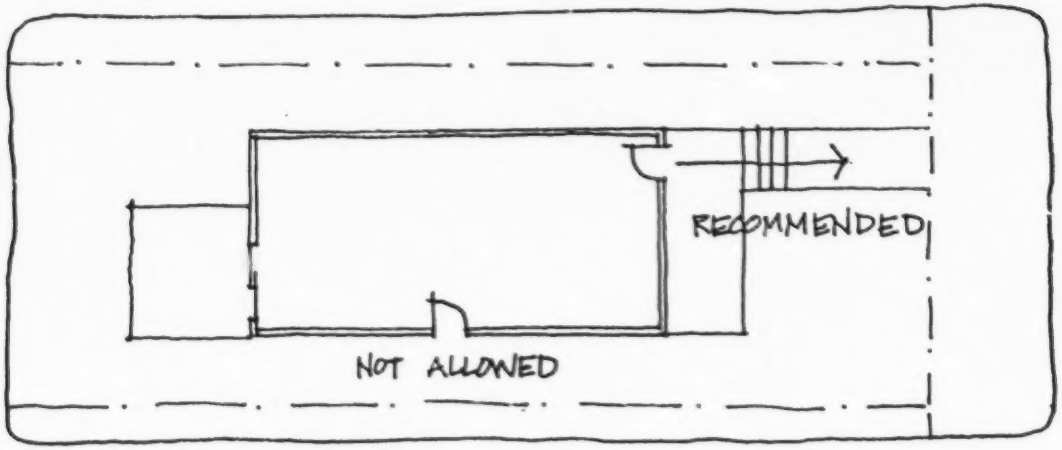
2. Privacy

- Since new development in South Rossdale will inevitably be dwellings of greater area, they will overlook existing homes and yards.

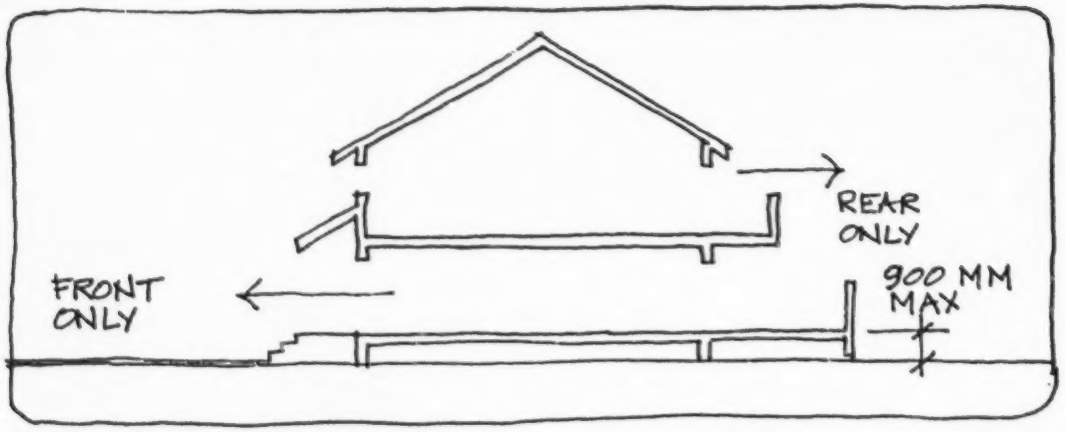
- To lessen this impact, new developments should minimize window openings on side walls. These openings should be oriented or placed such that they respect the location of windows and the location of outdoor amenity spaces of adjacent properties.



- No entry to any new dwelling unit should be placed on the major side walls and the primary entry should be oriented generally towards the front of the property and the street.



- The height of any raised decks shall not exceed 900 mm (3 feet) above grade. Second storey balconies shall only be located on the front and rear of a new building.

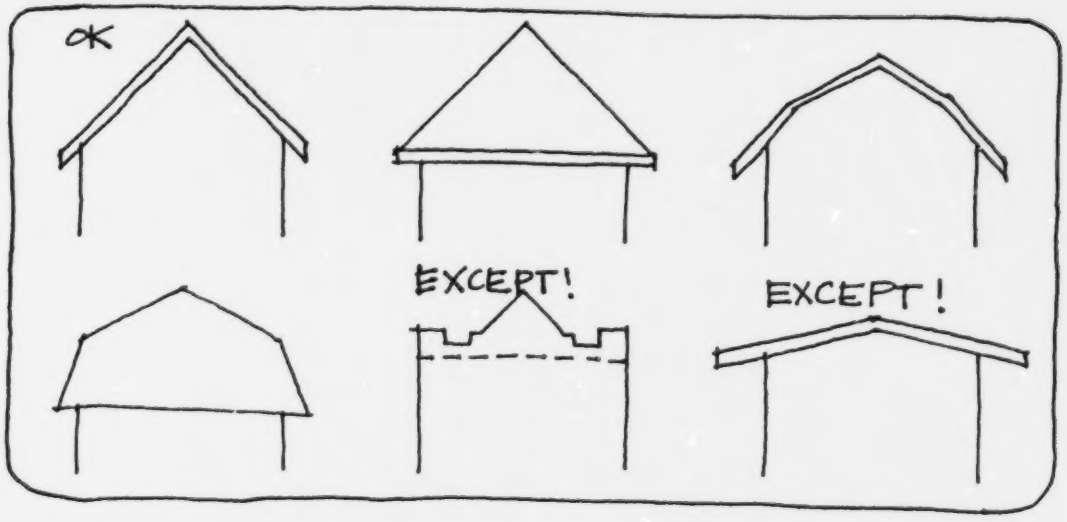


3. Materials and Finishes

To be totally consistent with the historic nature of South Rossdale, severe restrictions should be imposed on exterior cladding. Since the existing structures date back as far as the late 1800's, choice of cladding materials should be restricted to narrow lap wood, aluminum, or vinyl siding and shingles, of colour and finish consistent with the inner city nature of the area.

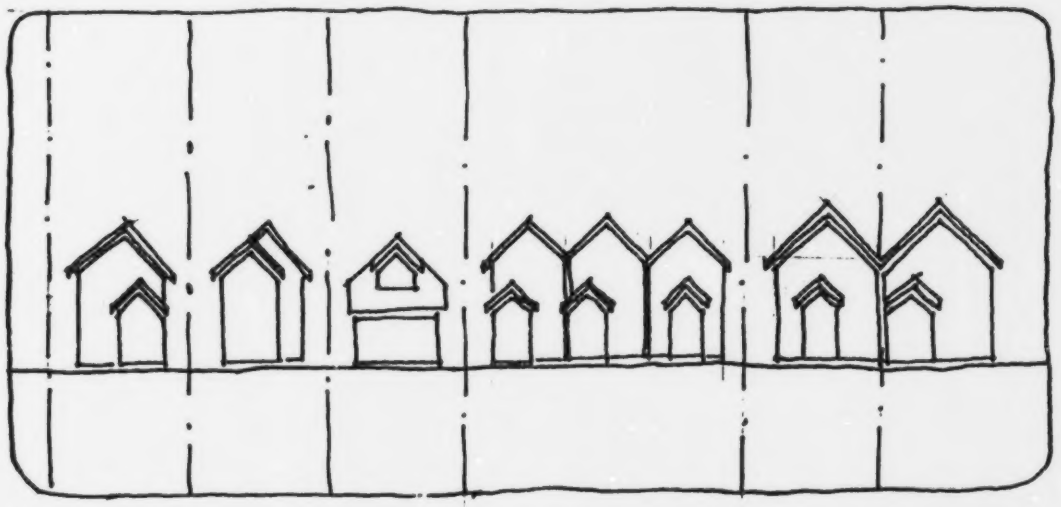
4. Roof Form

Many pitched roof forms exist in South Rossdale, from cottage to steeply sloped, and this variety should be encouraged. Flat roofs and low slope roofs with large overhangs should be avoided.



5. Unit Identity/Rhythm

Each unit of a semi-detached, duplex or row house building should be articulated as an individual unit with a prominent street oriented entryway on the building wall facing the street. Separate and/or secondary roof forms, dissimilar facades, and different cladding materials should all be used to define separate units and establish a 7.5 to 10.0 metre interval of facade corresponding to the characteristic frontage of the area.



Identical unit types or models should not be allowed within three lot widths of each other, and where they are situated in close proximity, they should incorporate varied facades, roof forms, colour or cladding to mitigate their similarity.

6. End Lots/Parcels

Within South Rossdale, there exists a number of special condition lots and/or parcels. All of these exist as end conditions on flanking public roadways.

a) The street corner lots facing the avenues will be an integral part of the proposed 'Community Street', both as street wall and in establishing an

activity, address, and focus to the avenue and the corner of every cross street.

Consolidation of the end two lots of each block with 95th, 96th and 97th Avenue as flanking roadways should be undertaken. Re-subdivision of these parcels into fee simple lots fronting the avenues will be encouraged, thereby allowing row or semi-detached type development to occur fronting on the avenues.

Any form of development which occurs on the corner, however, must consider the following:

- Parking
  Parking, where possible, should have its access off the lane. If it does not, it should be an attached (drive under) garage. Care and consideration must be taken to minimize the impact of these garages on the planting interval of the cross streets. The impact of garage doors should be minimized by use of recesses or overhangs, and by using two smaller doors instead of a large double door.

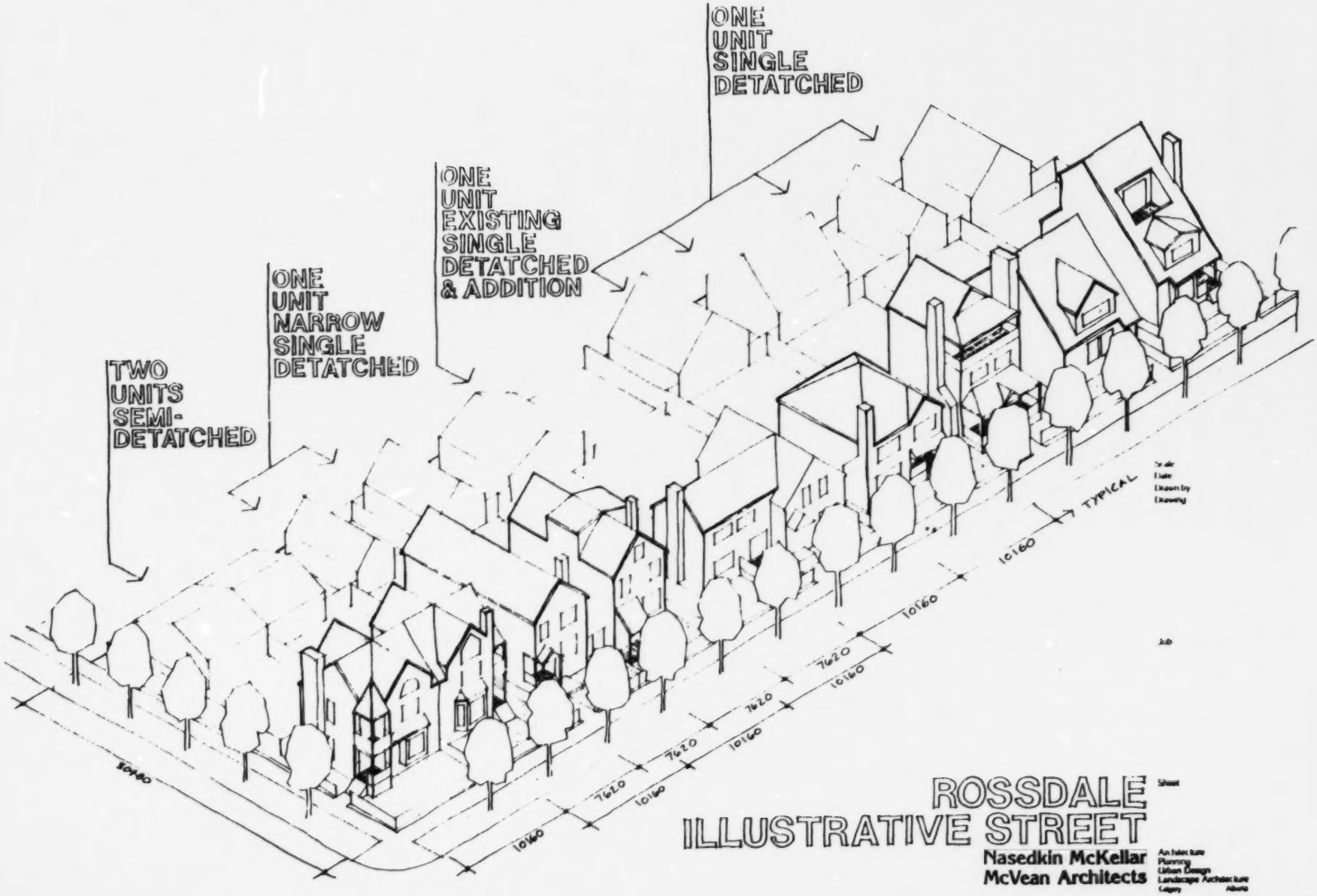
  There should be a minimum of 5.0 metres (16.4 feet) between the garage door and the back of walks, not only to minimize the impact, but also to provide additional temporary tandem parking.

- Corner Articulation
  Any dwelling located on a street corner should have its building corner articulated with some special design element. To accommodate this, yard relaxations of up to 1.2 metres (4 feet) should be allowed.

  The principal entry of a dwelling unit or units located on a street corner lot should face the flanking roadway.

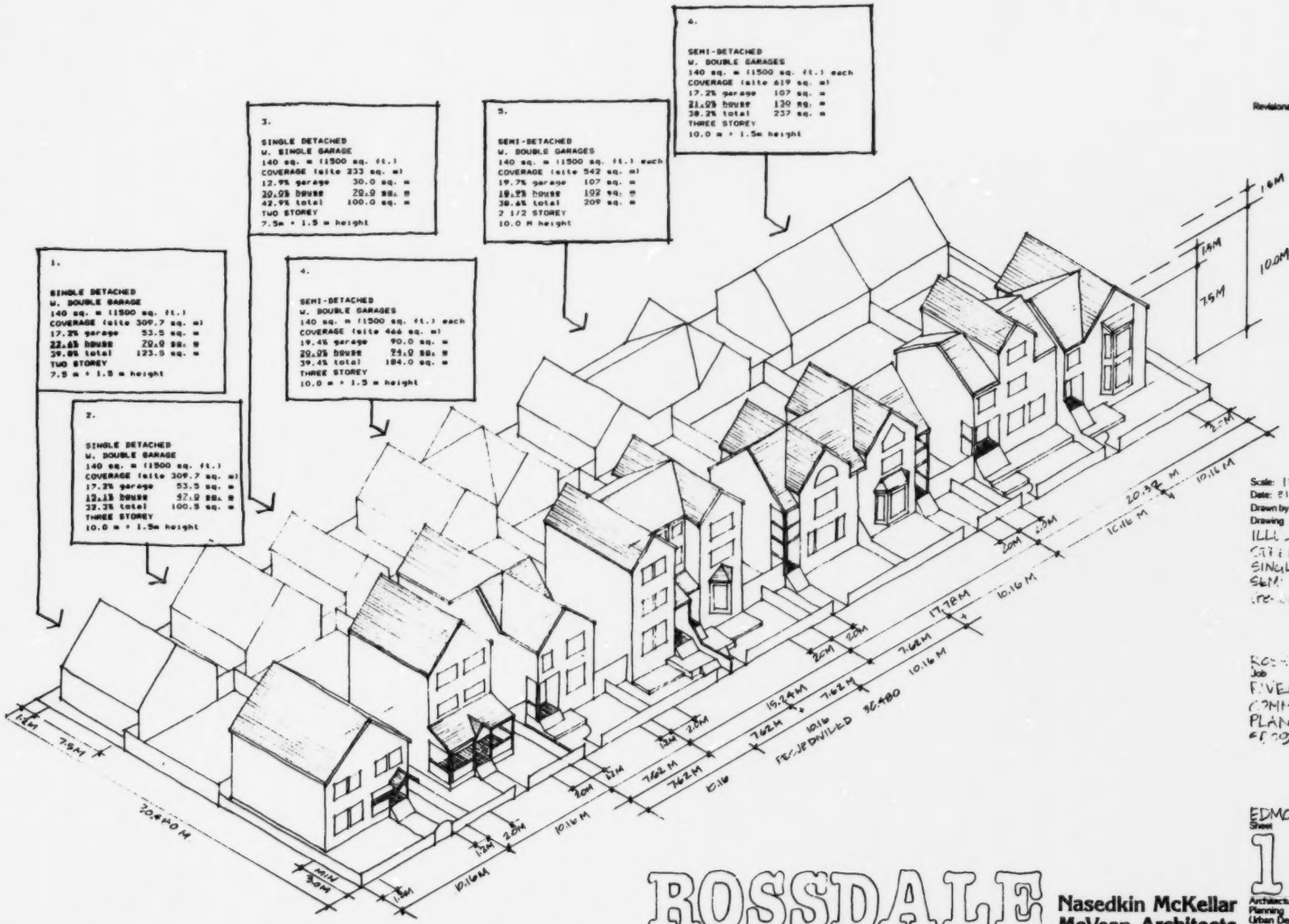
  Facade treatment on a corner site should respect the dual frontage with windows, projections and roof forms (primary and secondary).

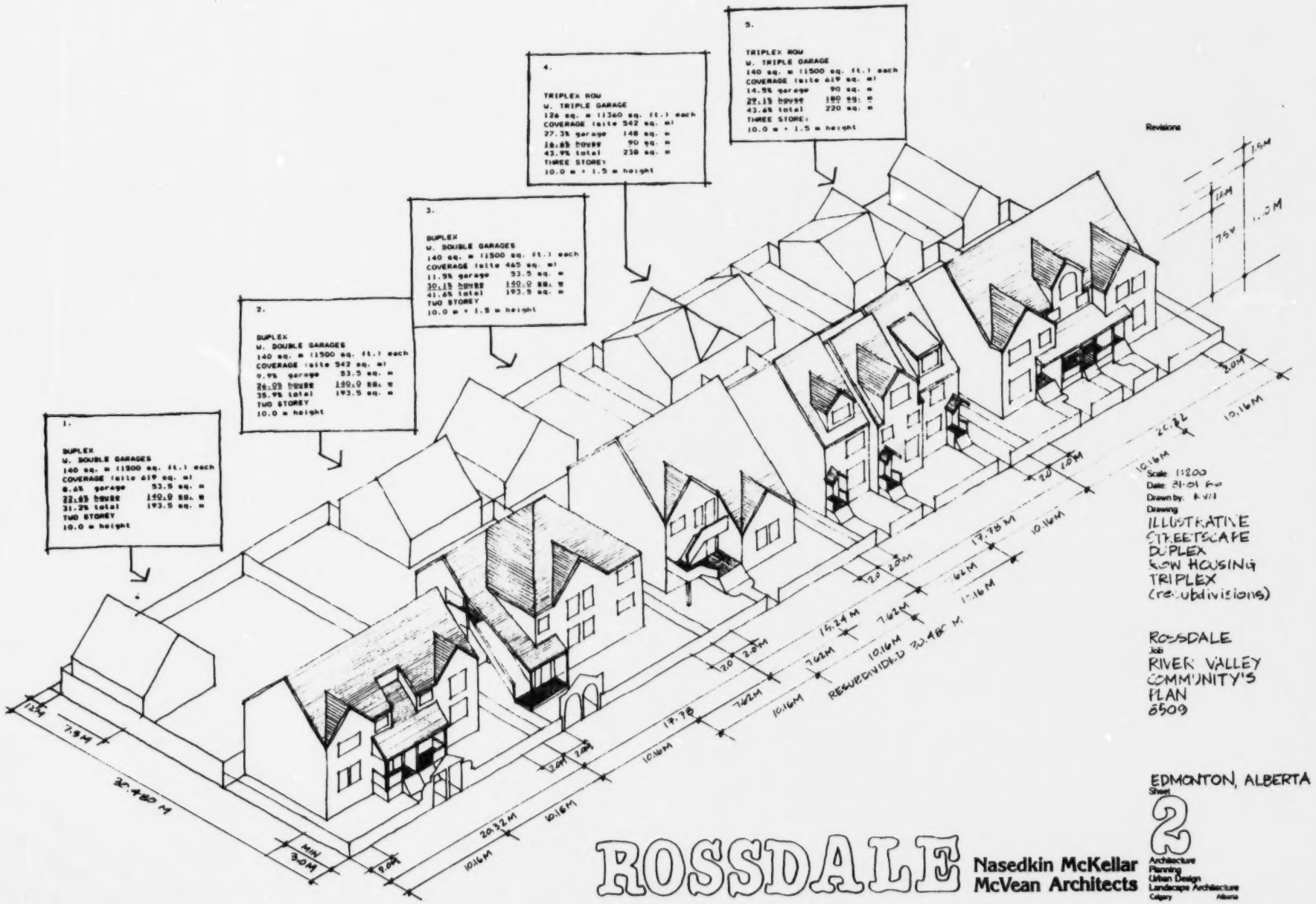
b) The commercial corner lots on 97th Avenue at 100A Street should remain as a non-conforming land use, and will eventually be redeveloped to residential uses.

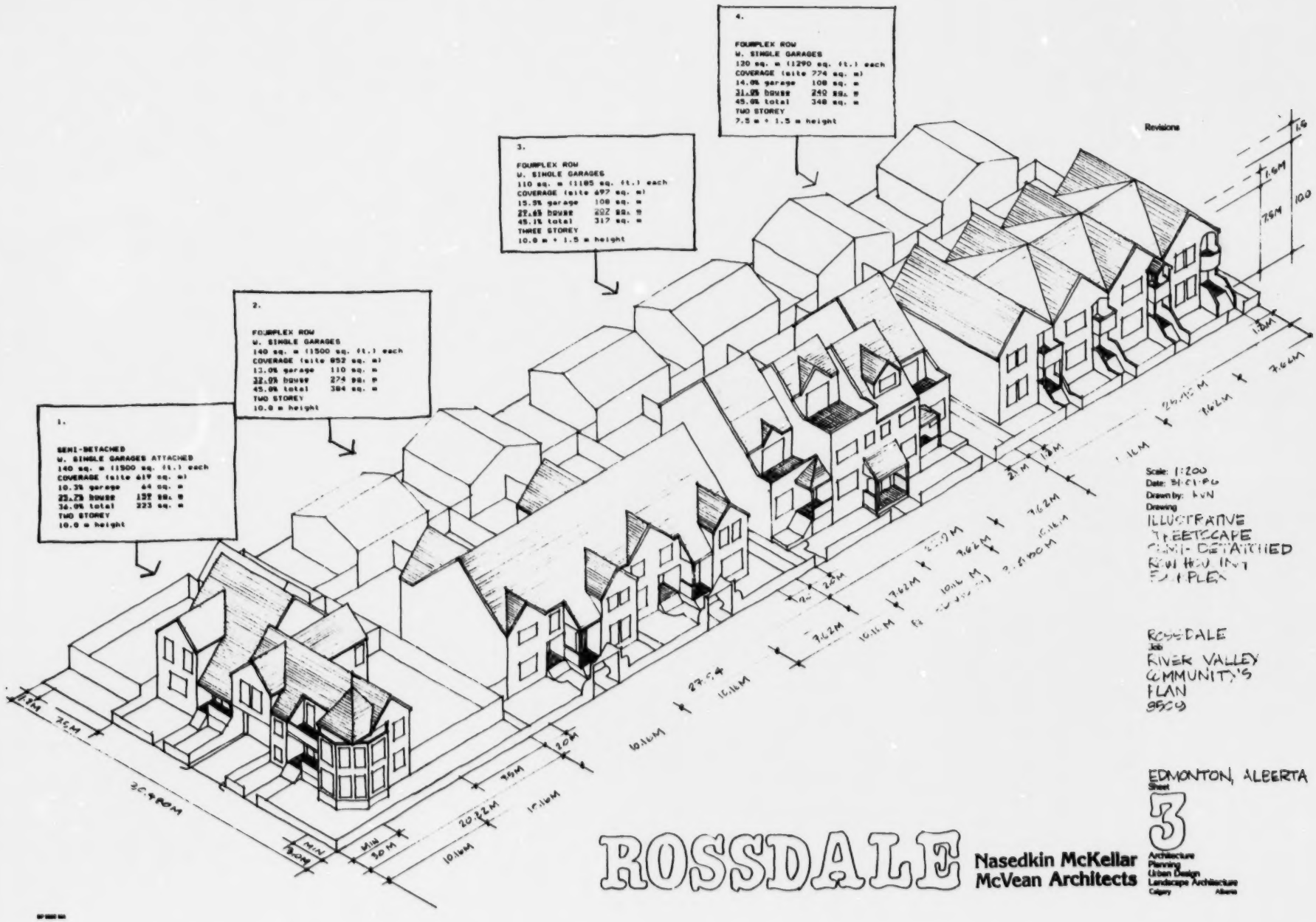


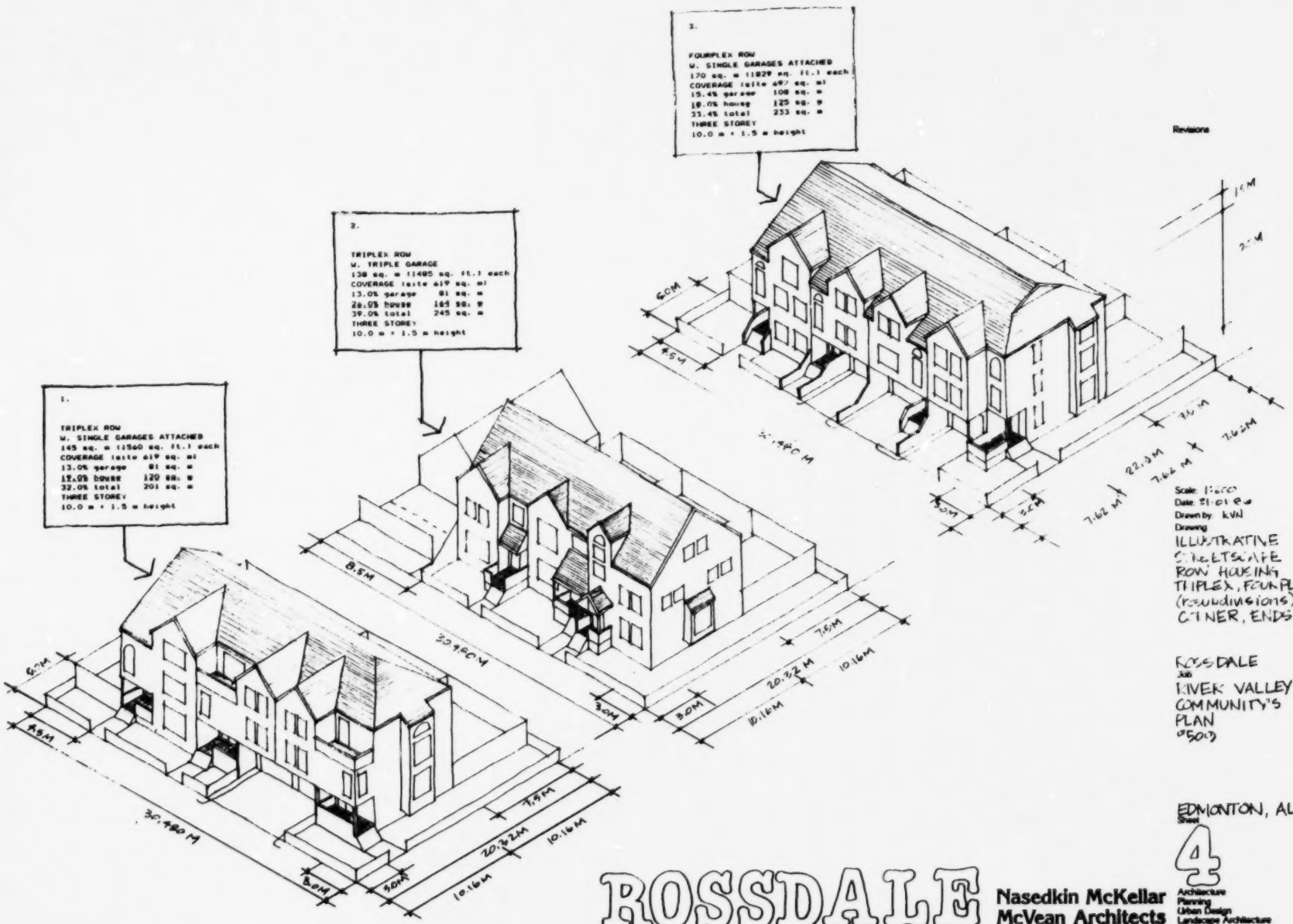
ROSSDALE ILLUSTRATIVE STREET

Nasedkin McKellar McVean Architects


1.
SINGLE DETACHED
W. DOUBLE GARAGE
140 sq. m (1500 sq. ft.)
COVERAGE (site 309.7 sq. m)
17.2% garage 53.5 sq. m
22.6% house 70.0 sq. m
39.8% total 123.5 sq. m
TWO STOREY
7.5 m + 1.5 m height
2.
SINGLE DETACHED
W. DOUBLE GARAGE
140 sq. m (1500 sq. ft.)
COVERAGE (site 309.7 sq. m)
17.2% garage 53.5 sq. m
15.1% house 47.0 sq. m
32.3% total 100.5 sq. m
THREE STOREY
10.0 m + 1.5m height
3.
SINGLE DETACHED
W. SINGLE GARAGE
140 sq. m (1500 sq. ft.)
COVERAGE (site 233 sq. m)
12.9% garage 30.0 sq. m
30.9% house 70.9 sq. m
42.9% total 100.0 sq. m
TWO STOREY
7.5m + 1.5 m height
4.
SEMI-DETACHED
W. DOUBLE GARAGES
140 sq. m (1500 sq. ft.) each
COVERAGE (site 466 sq. m)
19.4% garage 90.0 sq. m
20.0% house 94.0 sq. m
39.4% total 184.0 sq. m
THREE STOREY
10.0 m + 1.5 m height
5.
SEMI-DETACHED
W. DOUBLE GARAGES
140 sq. m (1500 sq. ft.) each
COVERAGE (site 542 sq. m)
19.7% garage 107 sq. m
18.9% house 102 sq. m
38.6% total 209 sq. m
2 1/2 STOREY
10.0 M height
4.
SEMI-DETACHED
W. DOUBLE GARAGES
140 sq. m (1500 sq. ft.) each
COVERAGE (site 619 sq. m)
17.2% garage 107 sq. m
21.0% house 130 sq. m
38.2% total 237 sq. m
THREE STOREY
10.0 m + 1.5m height
Revisions
1.0M
1.5M
7.5M
10.0M
Scale: 1:200
Date: 81.01.20
Drawn by: AVJ
Drawing
ILLUSTRATIVE
STREETSCAPE
SINGLE DETACHED
SEMI DETACHED
(re-subdivisions)
ROSSDALE
Job
RIVER VALLEY
COMMUNITY'S
PLAN
EDMONTON, ALBERTA
Sheet
1
ROSSDALE
Nasedkin McKellar
McVean Architects
Architecture
Planning
Urban Design
Landscape Architecture
Calgary
Alberta


1.
DUPLEX
w. DOUBLE GARAGES
140 sq. m (1500 sq. ft.) each
COVERAGE (alto 619 sq. m)
6.6% garage 53.5 sq. m
22.6% house 180.0 sq. m
31.2% total 193.5 sq. m
TWO STOREY
10.0 m height
2.
DUPLEX
w. DOUBLE GARAGES
140 sq. m (1500 sq. ft.) each
COVERAGE (alto 542 sq. m)
9.9% garage 53.5 sq. m
26.0% house 140.0 sq. m
35.9% total 193.5 sq. m
TWO STOREY
10.0 m height
3.
DUPLEX
w. DOUBLE GARAGES
140 sq. m (1500 sq. ft.) each
COVERAGE (alto 465 sq. m)
11.5% garage 53.5 sq. m
30.1% house 140.0 sq. m
41.6% total 193.5 sq. m
TWO STOREY
10.0 m + 1.5 m height
4.
TRIPLEX ROW
w. TRIPLE GARAGE
126 sq. m (1360 sq. ft.) each
COVERAGE (alto 542 sq. m)
27.3% garage 148 sq. m
16.6% house 90 sq. m
43.9% total 238 sq. m
THREE STOREY
10.0 m + 1.5 m height
5.
TRIPLEX ROW
w. TRIPLE GARAGE
140 sq. m (1500 sq. ft.) each
COVERAGE (alto 619 sq. m)
14.5% garage 90 sq. m
27.1% house 180 sq. m
43.6% total 220 sq. m
THREE STOREY
10.0 m + 1.5 m height
Revisions
Scale: 1:200
Date: 81-01-20
Drawn by: A.V.N.
Drawing
ILLUSTRATIVE
STREETSCAPE
DUPLEX
&
ROW HOUSING
TRIPLEX
(re-subdivisions)
ROSSDALE
Job
RIVER VALLEY
COMMUNITY'S
PLAN
8509
EDMONTON, ALBERTA
Sheet
2
ROSSDALE
Nasedkin McKellar
McVean Architects
Architecture
Planning
Urban Design
Landscape Architecture
Calgary Alberta


1.
SEMI-DETACHED
W. SINGLE GARAGES ATTACHED
140 sq. m (1500 sq. ft.) each
COVERAGE (site 619 sq. m)
10.3% garage 64 sq. m
25.7% house 159 sq. m
36.0% total 223 sq. m
TWO STOREY
10.0 m height
2.
FOURPLEX ROW
W. SINGLE GARAGES
140 sq. m (1500 sq. ft.) each
COVERAGE (site 852 sq. m)
13.0% garage 110 sq. m
32.0% house 274 sq. m
45.0% total 384 sq. m
TWO STOREY
10.0 m height
3.
FOURPLEX ROW
W. SINGLE GARAGES
110 sq. m (1185 sq. ft.) each
COVERAGE (site 697 sq. m)
15.5% garage 108 sq. m
27.6% house 209 sq. m
43.1% total 317 sq. m
THREE STOREY
10.0 m + 1.5 m height
4.
FOURPLEX ROW
W. SINGLE GARAGES
120 sq. m (1290 sq. ft.) each
COVERAGE (site 774 sq. m)
14.0% garage 108 sq. m
31.0% house 240 sq. m
45.0% total 348 sq. m
TWO STOREY
7.5 m + 1.5 m height
Revisions
Scale: 1:200
Date: 84-01-26
Drawn by: KVN
Drawing
ILLUSTRATIVE STREETSCAPE SEMI-DETACHED ROWHOUSING FOURPLEX
ROSSDALE
Job
RIVER VALLEY COMMUNITY'S PLAN 9509
EDMONTON, ALBERTA
Sheet
3
ROSSDALE
Nasedkin McKellar McVean Architects
Architecture Planning Urban Design Landscape Architecture
Calgary Alberta


1.
TRIPLEX ROW
w. SINGLE GARAGES ATTACHED
145 sq. m (1560 sq. ft.) each
COVERAGE (site 619 sq. m)
13.0% garage 81 sq. m
19.0% house 120 sq. m
32.0% total 201 sq. m
THREE STOREY
10.0 m + 1.5 m height
2.
TRIPLEX ROW
w. TRIPLE GARAGE
138 sq. m (1485 sq. ft.) each
COVERAGE (site 619 sq. m)
13.0% garage 81 sq. m
26.0% house 165 sq. m
39.0% total 245 sq. m
THREE STOREY
10.0 m + 1.5 m height
3.
FOURPLEX ROW
w. SINGLE GARAGES ATTACHED
170 sq. m (1829 sq. ft.) each
COVERAGE (site 497 sq. m)
15.4% garage 108 sq. m
18.0% house 125 sq. m
33.4% total 233 sq. m
THREE STOREY
10.0 m + 1.5 m height
Revisions
Scale: 1:500
Date: 81-01-06
Drawn by: KVN
Drawing
ILLUSTRATIVE
STREETSCAPE
ROW HOUSING
TRIPLEX, FOURPLEX
(resubdivisions)
CORNER, ENDS.
ROSSDALE
Job
RIVER VALLEY
COMMUNITY'S
PLAN
(50%)
EDMONTON, ALBERTA
Sheet
4
ROSSDALE
Nasedkin McKellar
McVean Architects
Architecture
Planning
Urban Design
Landscape Architecture
Calgary Alberta